

KYEMS Partnership Demonstration Grant

Program Narrative

Section I: Problem Statement

The Kentucky EMS For Children (KYEMSC) Program is housed within the Kentucky Board of Emergency Medical Services (KBEMS). The principle investigator and program director for KYEMSC is Dr. Mary Fallat, who provides direct oversight to ensure that the goals of the program are attained. Dr. Fallat currently serves as a KBEMS member and the chair of the KYEMSC Subcommittee. Thomas Taylor serves as the KYEMSC Program Coordinator. Working with Dr. Fallat and the KYEMSC Subcommittee, Mr. Taylor manages the program. The KBEMS provides additional input and guidance for the EMSC program. Kentucky received its first EMSC partnership grant in 2000, which positioned prehospital care for children within the newly created Kentucky Board of EMS (KBEMS). The grant fostered changes in the way Kentucky administers to the emergency medical needs of children in the following ways.

Legislative

- Creation of the KYEMSC Project Coordinator job description in state law, whose purpose is to implement, promote, and manage EMSC programs in Kentucky. The KYEMSC Coordinator serves as a consultant to KBEMS, other state agencies and local EMS systems, frequently providing input regarding pediatric issues in policies, guidelines, and educational programs.
- Implementation of the “Thomas J. Burch Safe Infants Act” that allows parents of an unwanted newborn to surrender the newborn to proper authorities without fear of prosecution.
- Passage of Senate Bill 60, which allows for the sale of commemorative birth certificates and marriage licenses. The proceeds from these sales will fund initiatives of the KYEMSC Program.

Administrative:

- Creation of the KYEMSC Subcommittee whose goal is to form a collaborative approach towards the improvement of prehospital pediatric care and injury prevention.
- The creation of the offices of the KYEMSC Program to house the equipment and activities of the program.

Medical:

- Development of a set of standardized prehospital pediatric protocols.
- Training of EMSC providers in Pediatric Education for Prehospital Professionals (PEPP), Pediatric Advanced Life Support (PALS).
- Implementation of a statewide instructor network to facilitate recertification and ongoing training.

Networking:

- Attendance at the EMSC Grantees Meeting and Southeast Regional Conferences to increase awareness of pediatric care in our state.

- Attendance at NEDARC workshops to enhance the use of computers, data and scientific information within the program.
- Creation of the KYEMSC web page at www.KBEMS.org/EMSforChildren/index.htm has given us an avenue to promote EMSC, publish a standardized set of pediatric protocols, advise about training opportunities, and publish the minutes of the KYEMSC Subcommittee meetings.
- Establishing an EMSC exhibitor's booth at the annual state EMS conference and a KYEMSC PEPP track for training to promote and enhance the visibility of the KYEMSC Program.

Continued funding of the KYEMSC Program will ensure a permanent presence for EMSC in Kentucky, promote a higher level of interest statewide in KYEMSC activities, support EMSC activities, support the training of emergency care providers through EMSC courses, and expand EMSC programs. This new project period will focus on three particular areas of need:

- **Children's issues in disaster preparedness and trauma system development.** Kentucky is developing "regional plans" for bioterrorism preparedness and Kentucky also has a grant for Trauma/EMS System Development. The EMSC project can ensure that pediatric needs are met during each of these planning processes, and make sure that pediatric interests are integrated into written plans. Emergency responders have limited training with respect to the triage of children involved in a mass-casualty situation; the equipment packages for many EMS systems do not include pediatric equipment or color-coded tapes; school emergency plans primarily focus on situations that involve a student wielding a weapon or sudden, short-term events (such as a tornado). Each of these issues will be separately addressed.
- **Performance improvement and provider education regarding pediatric emergency care.** Many EMS systems do not use color-coded tapes to determine the proper size of equipment and medication dose for children; few EMS Systems employ the SCOPE program for children with special health care needs; pediatric-related continuing education programs for EMS personnel are generalized and do not target the specific needs of a particular EMS system or the concept of family-centered care.
- **Communication regarding pediatric emergencies and emergency care.** Communication between EMS systems is fractured and inconsistent; there is no widespread dissemination of information about pediatric emergencies and emergency care specific to Kentucky.

Section II: Objectives, Methods, and Evaluation Measures

Goals And Objectives

Goal One: Prepare emergency responders to treat children involved in natural or man-made disasters.

Objectives:

- 1a. Review equipment packages currently mandated by KBEMS to insure that pediatric medications, equipment, and color-coded resuscitation tapes are included. Insure that pediatric needs are considered and met during

regionalization for Bioterrorism preparedness and Trauma System Development planning.

1b. Provide mass casualty triage training to emergency responders and regional response teams.

1c. Incorporate a “model” disaster plan for schools into regional EMS system development

1d. Assist the KIPRC with development of a pediatric module for Bioterrorism Preparedness Resource materials.

1e. Provide pediatric input to regional plans and trauma system development.

Goal Two: Continue to improve emergency medical care offered to children by EMS providers.

Objectives:

2a. Provide Special Children’s Outreach and Prehospital Education (SCOPE), START/JumpSTART mass casualty triage training, Pediatric Advanced Life Support (PALS) and/or Pediatric Education For Prehospital Professionals (PEPP) courses for approximately 250 students per year. These classes will be offered free of charge to Paramedics, First responders, and EMT’s.

2b. Establish “color-coding” as a standard for pediatric emergency care by providing pediatric resuscitation tapes to every ambulance in the Commonwealth free of charge.

2c. Provide a state wide pediatric educational symposium designed to attract EMS providers who may not have the opportunity to attend other classes. This symposium may include PEPP, PALS, START/JumpSTART mass casualty triage or SCOPE classes or other offerings as mandated by the KBEMS and/or KYEMSC Subcommittee.

2d. Develop a method to measure performance improvement and skill retention.

2e. Continue developing partnerships and improve communication between people and organizations that have pediatric interests and connect with Kentuckians about EMSC.

Methodology

Methodology for Goal One:

Recent natural disasters and the terrorist attacks in New York and Washington, DC, have ignited a renewed commitment in the state of Kentucky to strengthen statewide disaster preparedness and improve the capacity to respond. Kentucky has been divided into 16 regions that are based on an old Centers For Disease Control (CDC) scheme. The Kentucky Hospital Association (KHA) has adopted these regions for the purpose of

disaster preparedness, planning, and response. Under the direction of the KHA and the Department of Public Health each region has assembled a core group of stakeholders who have met and developed a “regional plan” to coordinate a response to the multiple disaster scenarios that exist. These regional teams have been developed through funding provided by both CDC and HRSA Bioterrorism Preparedness Grants. Dr. Mary Fallat has been appointed to the State Bioterrorism Task Force. The state also has a HRSA Trauma/EMS Systems Program Implementation Grant and Dr. Mary Fallat is the project director. Dr. William Hacker, a pediatrician currently serving as the Branch Manager of the Public Health Preparedness Branch in the Department of Public Health, is aware of the importance of integrating children’s interests into both Bioterrorism Preparedness and Trauma System Planning. He has recognized the role that EMSC can provide in this process and will help us facilitate pediatric input into regionalization schemes. These efforts will provide a unique opportunity for the KYEMSC Program to ensure that these teams are prepared to treat children. The KYEMSC Program will:

- Review the equipment packages for each regional response team to make sure that the packages include all appropriate pediatric equipment [Objective 1a],
- Provide Broselow™ color-coded tapes for each regional response team [Objective 1a]
- Provide START/JumpSTART Triage training classes for identified members of each response team [Objective 1b].
- Incorporate a “model” disaster plan for schools into regional disaster planning efforts [Objective 1c].
- Assist the KIPRC with development of a pediatric module for Bioterrorism Preparedness Resource materials. These resource materials should include pediatric specific medication dosing regimens, decontamination protocols, and transport safety guidelines [Objective 1d].
- Provide pediatric input to regional plans and trauma system development.

START (Simple Triage and Rapid Treatment) is a nationally accepted technique used when resources are limited in a multiple-patient event to determine whether patients are critical or stable. START is a 60-second assessment that focuses on a patient’s neurological status, respiratory rate, pulse, and ability to walk. JumpSTART is a variation of the START technique that considers the physiological and developmental differences of children up to eight years of age. The START/JumpSTART training programs will be offered in at least six different regions of the state during year one and five different regions during each of years two and three of the grants project. Two classes will be offered in each region. Each class will last approximately four hours, and will include both a lecture presentation and practical exercise. Members of the KYEMSC Instructor Pool developed from the preceding KYEMSC Partnership Demonstration Grant will conduct the courses [Objective 1b].

Additionally, the KYEMSC Program will convene a statewide, representative group of stakeholders to develop a model disaster plan for public and private schools [Objective 1c]. This group will include representatives from The Kentucky Department of Education,

the KY School Nurses Association, and will also include local Emergency Management, EMS, school system, and parent representatives. Current disaster plans often focus on a select

few scenarios, and EMS Systems rarely have input into the plans. The school disaster-planning group will meet at least three times during year one of the project, and at least once during years two and three. Once approved by the group and a selected group of reviewers, the model plan will be printed and disseminated to all EMS and school systems in KY. The disaster plan will be distributed to local EMS agencies, Emergency Management, and school system administrators using the state regionalization scheme.

The Kentucky Injury Prevention and Research Center (KIPRC) has developed the Terrorism

Response and Preparedness (TRAP) project which focuses on biological, chemical, radiological,

incendiary and explosive terrorism preparedness for first responders and allied personnel. The

majority of this training is distributed through computer and web-based services.

Certifications

are issued upon successful completion of the course material. Currently there is no pediatric specific information in this course. KYEMSC will assist KIPRC in the development of this program initially by writing a pediatric module for the course.

Ongoing efforts will include increasing first responder awareness of the course, to provide feedback about pediatric issues presented in the course, and provide feedback to KIPRC from

EMS providers who have taken the course [Objective 1d].

Kentucky has received grants from both the CDC and HRSA for Bioterrorism Preparedness. A State Bioterrorism Task Force has been appointed and meets quarterly. Kentucky has 16 regions that are based on an old CDC scheme, which the Kentucky Hospital Association (KHA) has adopted for purposes of bioterrorism preparedness planning. Under the direction of the KHA and the Department of Public Health, each region has developed a fundamental “regional plan”. None of these regional plans currently consider either children or trauma system initiatives. Dr. William Hacker, a pediatrician who is an administrator within the Department of Public Health, has recognized the importance of including trauma system development in bioterrorism planning needs, and has also recognized the need to make sure that children are considered in every aspect of this planning process. He recently facilitated the appointment of Dr. Fallat to the State Bioterrorism Task Force. This appointment ensures that both trauma and pediatric needs will be considered, as Dr. Fallat is the Project Director for both the current HRSA Trauma/EMS Systems Planning Grant and the EMSC Partnership Grant. Both of these grants have been awarded to the KBEMS. Dr. Hacker has committed to allowing a pediatric representative to be present in subsequent regional planning meetings, and to have input into the final regional planning process and implementation. He has recognized the important role that EMSC plays within KBEMS and feels that the subcommittee is well positioned to provide the necessary input into this planning process [Objective 1e].

Methodology for Goal Two:

The overall quality of pediatric patient care by EMS personnel in Kentucky is largely unknown. Although the KYEMSC Program has developed and supported many pediatric care educational programs, there has been no objective, statewide method to evaluate the impact of these educational programs. Throughout the life of this grant KYEMSC will provide a variety of prehospital education programs that enhance pediatric emergency care, including the “color-coding” concept. We will work with the KBEMS and KYEMSC Subcommittee to develop a method by which training retention may be measured. The KYEMSC Program will:

- Provide Special Children’s Outreach and Prehospital Education (SCOPE), START/JumpSTART mass casualty triage training, Pediatric Advanced Life Support (PALS) and/or Pediatric Education For Prehospital Professionals (PEPP) courses for approximately 250 students per year. These classes will be offered free of charge to Paramedics, First responders, and EMT’s [Objective 2a]. Instructors will be provided through the KYEMSC Instructor Pool established during the previous grant period. Instructor reimbursement will be provided through this Partnership Demonstration Grant. Textbooks will be provided for each student from the KYEMSC textbook stockpile.
- To further improve the quality of care rendered by EMS personnel, the KYEMSC Program will purchase and distribute Broselow™ color-coded tapes to all EMS agencies in Kentucky [Objective 2b]. Distribution of the Broselow™ tapes will begin in early 2004, and will continue through years one and two of the project. Distribution of these tapes will be the responsibility of the Program Coordinator who will create and maintain a database describing the details of this distribution process.
- Provide a state wide pediatric educational symposium in year two designed to attract EMS providers from across the state [Objective 2c]. This symposium may include PEPP, PALS, START/JumpSTART mass casualty triage or SCOPE classes or other offerings as mandated by the KBEMS and/or KYEMSC Subcommittee. The symposium is directly aimed at increasing communication between EMS agencies [Objective 2e], and provides an opportunity to measure skills and knowledge retention [Objective 2d]. Those attendees who have previously attended KYEMSC sponsored educational opportunities will be asked to submit to testing similar to the post course test required for course completion in their original class.
- Skill and knowledge retention testing [Objective 2d] will become part of the follow-up for 25% of the previous year’s students. This testing will consist of written testing and skills evaluation similar to the post course test required for course completion in their original class. Test scores from the original class will be blinded but compared to subsequent scores, and reviewed by the KYEMSC Subcommittee. This information will greatly enhance the subcommittee’s ability to select and promote educational opportunities that are relevant to the EMS community and the goals of the KYEMSC Program.

- Partnerships that have developed from KYEMSC involvement in various projects should be maintained. The KYEMSC Program Coordinator will continue his membership with the Kentucky Child Fatality Review Board. KYEMSC subcommittee members are involved with the Kentucky Safe Kids Coalition, KIPRIC, Ky. Hospice, and a number of EMS agencies. These affiliations have provided invaluable insight into the needs of Kentucky's children and the educational needs of Kentucky EMT's, First Responders, and Paramedics.

Evaluation

The KYEMSC Program will meet objective one when:

- 100% of Kentucky Regional Response Teams have been equipped with color-coded pediatric resuscitation tapes and are using KYEMSC standardized pediatric protocols.
- 100% of Kentucky Regional response Teams are trained in START/JumpSTART and pediatric triage is integrated into the regionalization network.
- Pediatric issues including those involved in disaster preparedness, trauma triage and trauma system development, and a model disaster plan for schools have been considered and incorporated into every regional plan for Bioterrorism and Trauma Preparedness.

The KYEMSC Program will meet objective two when:

- 250 students per year have been trained in SCOPE, PALS, PEPP, or trauma triage.
- color-coding has been established as the standard for pediatric care in Kentucky and 100% of Kentucky's ambulances have been equipped with color-coded pediatric resuscitation tapes.
- a training retention evaluation format is established and 65 (approx. 25%) of the previous year's students have been tested for knowledge and skills retention..

Section III: Organizational Structure for Management

The principle investigator and project director for the KYEMSC Partnership Demonstration grant is Dr. Mary Fallat, who provides oversight of the KYEMSC program to assure that the Program meets its goals and objectives. The project coordinator is Thomas Taylor EMT-P. The project coordinator, who reports directly to the project director, manages the project and coordinates activities that support project objectives. The KBEMS secretary provides clerical support to the project coordinator. The Chair of the KYEMSC Subcommittee, Dr. Mary Fallat, acts as pediatric medical advisor to the KYEMSC Program. The KYEMS Physician Medical Advisor also provides input and guidance for the EMSC project. The EMSC Subcommittee of the KBEMS reviews project activities and suggests modification of the activities as needed to accomplish the project goals and objectives.

Acknowledgements:

The Kentucky Board of EMS and The Kentucky EMS for Children Project would like to thank the following individuals for taking the time to answer questions, review drafts, and offer suggestions regarding this grant proposal.

*Jane Ball, EMSC NRC
Mickey Reynolds, MCHB
Amy Donaldson, NEDARC*

Section IV: Budget Narrative

Detailed Budget Year One

Personnel

Program Manager (Appendix 6.6)

.....\$43,440

Funds will support a full-time Program Manager's position that has been upgraded to a merit position reflecting the commitment to permanence for the KYEMSC Program. This position will continue to serve directly under the Kentucky Board Of Emergency Medical Services (KBEMS).

Program Director (Appendix 6.6).....0.05 FTE:

In-Kind

Mary E. Fallat, M.D. has been appointed to the KBEMS as the physician with expertise in caring for ill and injured children. As Project Director for the KYEMSC Grant, she

will serve as the medical advisor for the KYEMSC Program. She will also represent KYEMSC in her position as a University of Louisville School of Medicine faculty member. This position reflects in-kind support from the University of Louisville of over \$4,000 each year.

Staff Support (Appendix 6.6).....0.50 FTE:
\$9,000

Staff support will be provided by the EMSC grant, under contract with the KBEMS, to provide secretarial support to the KYEMSC Program Manager.

Fringe

Benefits.....\$14,012

This amount represents benefits for the Program Manager and Office Staff at the Kentucky rate.

In-State

Travel.....\$14,400

Travel will be required to represent KYEMSC issues at EMS meetings, conferences and activities to ensure that pediatric concerns are addressed. Travel is also required periodically for KYEMSC training program support and to network with professional and community groups and to encourage adoption of pediatric programs and resources. This will require per diem and lodging expenses of \$4,800: this figure represents lodging for four nights per month at \$70 per night and per diem of \$30 times four days per month. Mileage will be required for travel to meeting sites, training sites, conference locations, planning and evaluation meetings and KBEMS meetings. \$9,600 is budgeted for mileage. This represents travel at 2500 miles per month at the state reimbursement rate of \$0.32/mile

Out-Of-State

Travel.....\$4,621

Funding support as required by the grant is budgeted for two staff and one parent representing KYEMSC at the annual EMSC grantee conference. This amount includes a \$175.00 registration fee, four days per diem at \$37.00, three nights lodging at \$150.00 per night and travel costs estimated at \$434.00 for each of three representatives. Estimated total travel costs are \$3,621. An additional \$1000 is budgeted for one representative to attend NEDARC training to support EMS/EMSC data collection, linkage, and analysis as required by the grant.

Office Expenses /

Supplies.....\$7,832

This amount represents office rental at \$100 per month, internet access (required by the grant) and telephone / fax service at \$350 per month, postage at \$25 per month, copier supplies at \$25 per month, routine office consumables, meeting materials and office equipment maintenance, repair, or replacement at \$1,832 for the first year.

Office Equipment /

Computer.....\$6,500

Funds will support the purchase of computer equipment for the Project Coordinator. Two pieces will be outdated: laptop computer (\$3000); computer video projector for educational presentations (\$3500); to be used in support of the KYEMSC Training Network.

Indirect

Charges.....In-Kind

There will be no indirect costs charged to the KYEMSC Program by the KBEMS. This represents over \$3,000 of in-kind support from the KBEMS.

Training Courses (PEPP, PALS, and

SCOPE).....\$11,240

Training will be provided for 250 students in the first year. Funds from the grant are budgeted for instructor expense reimbursement. The money budgeted for four instructors for each course includes: estimated 2 nights lodging at \$70 per night, 2 days meals at \$30 per diem and mileage at the state rate of \$0.32 per mile at an estimated 175 miles each trip. Reimbursement will also include replacement of disposable training supplies (i.e. IO needles, practice IO legs, intubation supplies, etc.) at \$100 per course for an estimated 10 courses assuming full registration of 25 students per course. There is no charge to students for participation in any of these classes. The only cost incurred by students will be their own travel expenses. Textbooks are provided for all students. The Course Coordinators will be required to submit training rosters and class evaluations to the KYEMSC Program Manager and/or KYEMSC Office Staff, along with properly completed instructor reimbursement forms as provided by the KYEMSC Project Manager.

Kentucky Color Coding

Project.....\$3,955

Funds will be used to purchase color-coded Broselow™ tapes to distribute to EMS agencies (175 tapes / 5 ea. X 35 agencies) to establish color-coding as a standard of EMS care for children and to help treat children involved in disasters. Broselow™ tapes cost \$113 for a package of 5 tapes.

Total Budget: Year

One.....\$115,000

Detailed Budget Year Two

Personnel

Program Manager (Appendix 6.6)

.....\$45,612

Funds will support a full-time Program Manager's position that has been upgraded to a merit position reflecting the commitment to permanence for the KYEMSC Program. This position will continue to serve directly under the Kentucky Board Of Emergency Medical Services (KBEMS).

Program Director (Appendix 6.6).....0.05 FTE:
In-Kind

Mary E. Fallat, M.D. has been appointed to the KBEMS as the physician with expertise in caring for ill and injured children. As Project Director for the KYEMSC Grant, she will continue to serve as the medical advisor for the KYEMSC Program, and to represent KYEMSC in her position as a University of Louisville School of Medicine faculty member. This position reflects in-kind support from the University of Louisville of over \$4,000 each year.

Staff Support (Appendix 6.6).....0.50 FTE:
\$9,000

Staff support will be provided by the EMSC grant, under contract with the KBEMS, to provide secretarial support to the KYEMSC Program Manager.

Fringe
Benefits.....\$16,475

This amount represents benefits for the Program Manager and Office Staff at the Kentucky rate.

In-State
Travel.....\$14,400

Travel will be required to represent KYEMSC issues at EMS meetings, conferences and activities to ensure that pediatric concerns are addressed. Travel is also required periodically for KYEMSC training program support and to network with professional and community groups and to encourage adoption of pediatric programs and resources. This will require per diem and lodging expenses of \$4,800: this figure represents lodging for four nights per month at \$70 per night and per diem of \$30 times four days per month. Mileage will be required for travel to meeting sites, training sites, conference locations, planning and evaluation meetings and KBEMS meetings. \$9,600 is budgeted for mileage. This represents travel at 2500 miles per month at the state reimbursement rate of \$0.32/mile.

Out-Of-State
Travel.....\$4,846

Funding support as required by the grant is budgeted for two staff and one parent representing KYEMSC at the annual EMSC grantee conference. This amount includes a \$250.00 registration fee, four days per diem at \$37.00, three nights lodging at \$150.00 per night and travel costs estimated at \$434.00 for each of three representatives. Estimated total travel costs are \$3,836. An additional \$1000 is budgeted for one representative to attend NEDARC training to support EMS/EMSC data collection, linkage, and analysis as required by the grant.

Office Expenses /**Supplies.....\$6,225**

This amount represents office rental at \$100 per month, internet access (required by the grant) and telephone / fax service at \$350 per month, postage and copier supplies at \$25 per month each, routine office consumables, meeting materials and office equipment maintenance, repair, or replacement at \$525 for the second year.

Training Courses (PEPP, PALS, and**SCOPE).....\$4,496**

Training will be provided for 100 students in the second year. Funds from the grant are budgeted for instructor expense reimbursement. The money budgeted for four instructors for each course includes: estimated 2 nights lodging at \$70 per night, 2 days meals at \$30 per diem and mileage at the state rate of \$0.32 per mile at an estimated 175 miles each trip. Reimbursement will also include replacement of disposable training supplies (i.e. IO needles, practice IO legs, intubation supplies, etc.) at \$100 per course for an estimated 4 courses assuming full registration of 25 students per course. There is no charge to students for participation in any of these classes. The only cost incurred by students will be their own travel expenses. Textbooks are provided for all students. The Course Coordinators will be required to submit training rosters and class evaluations to the KYEMSC Program Manager and/or KYEMSC Office Staff, along with properly completed instructor reimbursement forms as provided by the KYEMSC Project Manager.

Kentucky Training**Conference.....\$13,946**

The KYEMSC will sponsor and host an educational conference to be held in Louisville, KY during year two lasting two days. The purpose of the conference will be to bring together students and instructors from across the state for educational purposes and input into the KYEMSC program. This will give us the opportunity to gauge the effectiveness of our educational efforts and recommend a course for the future of KYEMSC. Costs represent hotel lodging, daily parking, reception, lunch, continental breakfast, morning and afternoon breaks. Also included will be four additional rooms for breakout sessions each day.

Detailed Budget For Conference:

69.00 / Room X 50 guests	\$3,450
Parking \$9 / day / guest	\$900
Meals \$40 / day / guest	\$4,000
Mileage / guest (.32 / mile) (100 miles / guest)	\$1,600
Reception	\$1,500
Lecture Materials / copying / audio-visual supplies	\$ 896
Four break out session rooms (\$200 / room / day)	\$1,600
Conference SubTotal.....	\$13,946

Total Budget: Year**Two.....\$115,000**

Detailed Budget Year Three

Personnel

Program Manager (Appendix 6.6)

.....\$47,893

Funds will support a full-time Program Manager's position that has been upgraded to a merit position reflecting the commitment to permanence for the KYEMSC Program. This position will continue to serve directly under the Kentucky Board Of Emergency Medical Services (KBEMS).

Program Director (Appendix 6.6).....0.05 FTE:

In-Kind

Mary E. Fallat, M.D. has been appointed to the KBEMS as the physician with expertise in caring for ill and injured children. As Project Director for the KYEMSC Grant, she will continue to serve as the medical advisor for the KYEMSC Program, and will represent KYEMSC in her position as a University of Louisville School of Medicine faculty member. This position reflects in-kind support from the University of Louisville of over \$4,000 each year.

Staff Support (Appendix 6.6).....0.50 FTE: \$9,000

Staff support will be provided by the EMSC grant, under contract with the KBEMS, to provide secretarial support to the KYEMSC Program Manager.

Fringe

Benefits.....\$17,191

This amount represents benefits for the Program Manager and Office Staff at the Kentucky rate.

In-State

Travel.....\$14,400

Travel will be required to represent KYEMSC issues at EMS meetings, conferences and activities to ensure that pediatric concerns are addressed. Travel is also required periodically for KYEMSC training program support and to network with professional and community groups and to encourage adoption of pediatric programs and resources. This will require per diem and lodging expenses of \$4,800: this figure represents lodging for four nights per month at \$70 per night and per diem of \$30 times four days per month. Mileage will be required for travel to meeting sites, training sites, conference locations, planning and evaluation meetings and KBEMS meetings. \$9,600 is budgeted for mileage. This represents travel at 2500 miles per month at the state reimbursement rate of \$0.32/mile.

Out-Of-State

Travel.....\$4,681

Funding support as required by the grant is budgeted for two staff and one parent representing KYEMSC at the annual EMSC grantee conference. This amount includes a \$195.00 registration fee, four days per diem at \$37.00, three nights lodging at \$150.00

per night and travel costs estimated at \$434.00 for each of three representatives. Estimated total travel costs are \$3,682. An additional \$1000 is budgeted for one representative to attend NEDARC training to support EMS/EMSC data collection, linkage, and analysis as required by the grant.

Office Expenses /

Supplies.....\$7,770

This amount represents office rental at \$100 per month, internet access (required by the grant) and telephone / fax service at \$350 per month, postage at \$25 per month, copier supplies at \$25 per month, routine office consumables, meeting materials and office equipment maintenance, repair, or replacement at \$1,770 for the third year.

Indirect

Charges.....In-Kind

There will be no indirect costs charged to the KYEMSC Program by the KBEMS. This represents over \$3,000 of in-kind support from the KBEMS.

Training Courses (PEPP, PALS, and

SCOPE).....\$11,240

Training will be provided for 250 students in the third year. Funds from the grant are budgeted for instructor expense reimbursement. The money budgeted for four instructors for each course includes: estimated 2 nights lodging at \$70 per night, 2 days meals at \$30 per diem and mileage at the state rate of \$0.32 per mile at an estimated 175 miles each trip. Reimbursement will also include replacement of disposable training supplies (i.e. IO needles, practice IO legs, intubation supplies, etc.) at \$100 per course for an estimated 10 courses assuming full registration of 25 students per course. There is no charge to students for participation in any of these classes. The only cost incurred by students will be their own travel expenses. Textbooks are provided for all students. The Course Coordinators will be required to submit training rosters and class evaluations to the KYEMSC Program Manager and/or KYEMSC Office Staff, along with properly completed instructor reimbursement forms as provided by the KYEMSC Project Manager.

Kentucky Color Coding

Project.....\$2,825

Funds will be used to purchase color-coded Broselow™ tapes to distribute to EMS agencies (125 tapes / 5 ea. X 25 agencies) to establish color-coding as a standard of care for children and help treat children involved in disasters and further Broselow™ tapes cost \$113 for a package of 5 tapes.

Total Budget: Year

Three.....\$115,000

Appendix:

6.1 Checklist for Program Narrative

APPENDIX 6.1

CHECKLIST FOR PROGRAM NARRATIVE EMSC GRANT APPLICATION

The items listed below must accompany the EMSC grant application. This checklist has been prepared for use by an applicant to insure that Program Narrative section of the application is complete.

ITEM FOR SUBMISSION

CHECK IF INCLUDED

1. **TRANSMITTAL:** This letter must state whether the application is responding to a specific defined category (The category is “Partnership”)
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2. **PROGRAM NARRATIVE:** A complete, original ink-signed application and two additional signed copies must be submitted. All pages must be clearly numbered, of standard size (8½ x 11 inches) and printed on only one side. Margins should be 1 1/2 inches at the top and 1 inch at the bottom and both sides. Typeset must be no smaller than 12 cpi and not reduced. The original and each copy of the application set must be UNSTAPLED AND UNBOUND. The program narrative should be submitted in the same order as outlined in the "requirements for program narrative" sections in this Guidance. (Refer to pages 11, 17, and 24 of this Guidance).
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3. **LINE-ITEM BUDGET:** For all project years to be approved for funding.
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4. **APPENDICES:** The required appendices should follow their order of reference in this Guidance. Additional appendices may be added as needed.
Appendix 6.1 Checklist for program narrative
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Appendix 6.2 Key personnel form
—
Appendix 6.3 EMSC Project Abstract *in Electronic Format*
—
Appendix 6.4 Biographical Sketch
—
Appendix 6.5 Project Timeline
—
Appendix 6.6 Key Personnel Job Descriptions
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6.2 Key Personnel Form

SUPPLEMENTAL TO SECTION F OF FORM 424A APPENDIX 6.2
KEY PERSONNEL—YEAR 1

NAME AND POSITION TITLE	ANNUAL SALARY	NO. MONTHS BUDGET	% TIME	TOTAL AMOUNT REQUESTED
	(1)	(2)	(3)	(4)
Project Manager	\$55,292	12	100%	\$55,292
Staff Support	\$11,160	12	40%	\$11,160
FRINGE BENEFIT (Rate <u>24%</u>)	TOTAL			\$66,452

SUPPLEMENTAL TO SECTION F OF FORM 424A APPENDIX 6.2
KEY PERSONNEL—YEAR 2

NAME AND POSITION TITLE	ANNUAL SALARY	NO. MONTHS BUDGET	% TIME	TOTAL AMOUNT REQUESTED
	(1)	(2)	(3)	(4)
Program Manager	\$59,927	12	100%	\$59,927
Staff Support	\$11,160	12	40%	\$11,160
FRINGE BENEFIT (Rate <u>24%</u>)	TOTAL			\$71,087

SUPPLEMENTAL TO SECTION F OF FORM 424A APPENDIX 6.2
KEY PERSONNEL—YEAR 3

NAME AND POSITION TITLE	ANNUAL SALARY	NO. MONTHS BUDGET	% TIME	TOTAL AMOUNT REQUESTED
	(1)	(2)	(3)	(4)
Program Manager	\$62,924	12	100%	\$62,924
Staff Support	\$11,160	12	40%	\$11,160
FRINGE BENEFIT (Rate <u>24%</u>)	TOTAL			\$74,084

6.3 EMSC Project Abstract Format Sheet and Keywords

EMSC Project Abstract

Project Title	Kentucky EMS For Children Program
Organization Name	Kentucky Board Of Emergency Medical Services
Address	2545 Lawrenceburg Road, Frankfort, Ky. 40601
Project Director	Dr. Mary Fallat
Contact Person	Thomas D. Taylor EMT-P, Program Coordinator
Project Period	Three years From 03-01-2004 To 03-01-2007
E-Mail Address	TomD.Taylor@mail.state.ky.us

PROBLEM:

Kentucky is a predominately rural state covering 40,395 square miles. The state's population of 4,041,769 (2000-census estimate) includes a population of 1,010,442 children under the age of 18. Kentucky has 120 counties. Advanced life support is available in 99 of these 120 counties. There are hospitals with emergency departments open 24 hours a day. Kentucky has 9,903 certified EMT-Basics, 1,870 EMT- First Responders and 1,684 certified EMT-Paramedics utilizing 1,020 licensed ground and 20 licensed air ambulances which make an estimated 725,000 ambulance runs per year statewide. Of this number, 19,219 are considered pediatric runs.

Prehospital education has historically been a major component of the KYEMSC Program. Further funding is needed to establish permanency for EMSC in Kentucky, to allow the program to have a high profile in statewide EMS activities, to support **first responder education** through EMSC sponsored courses, and to make sure that children's interests are represented in Bioterrorism and **Trauma System** Development efforts. This new project period will focus on:

- children's issues in **disaster preparedness** and **trauma system development**
- **improving communication** regarding EMSC initiatives
- **performance improvement** in pediatric emergency care

Goals And Objectives

Goal One: Assist EMS responders to treat children involved in natural or man-made disasters.

Objectives:

1. Review equipment packages currently mandated by KBEMS to insure that pediatric medications, equipment, and **color-coded** resuscitation tapes are included. Insure that pediatric needs are considered and met during

regionalization for Bioterrorism preparedness and Trauma System Development planning.

2. Incorporate a “model” **disaster plan** for schools into regional EMS system development.
3. Provide **mass casualty triage** training to emergency responders.
4. Assist the KIPRC (Kentucky Injury Prevention and Research Center) with development of a pediatric module for Bioterrorism Preparedness Resource materials.

Goal Two: Continue to improve emergency medical care offered to children by EMS providers.

Objectives:

1. Provide Special Children’s Outreach and Prehospital Education (SCOPE), **mass casualty triage** training, Pediatric Advanced Life Support (PALS) and/or Pediatric Education For Prehospital Professionals (PEPP) courses for approximately 250 students per year. These classes will be offered free of charge to Paramedics, First responders, and EMT’s.
2. Establish “**color-coding**” as a standard for pediatric emergency care by providing pediatric resuscitation tapes to every ambulance in the Commonwealth free of charge.
3. Provide a state wide pediatric educational symposium designed to attract EMS providers who may not have the opportunity to attend other classes. This symposium may include PEPP, PALS, **mass casualty triage** or SCOPE classes or other offerings as mandated by the KBEMS and/or KYEMSC Subcommittee.
4. Develop a method to measure **performance improvement** and skill retention.
5. Continue developing partnerships with people and organizations that have pediatric interests and connect with Kentuckians about EMSC.

Methodology

The KYEMSC Coordinator will coordinate and supervise activities supporting the program’s goals and objectives. The KYEMSC program director and subcommittee will review the program’s activities and suggest modifications as needed to insure completion of the goals.

For goal one, the KYEMSC Program will continue our “color-coding” project intended to provide a weight based and color-coded resuscitation tape to every Kentucky ambulance. The mass casualty triage class will teach and emphasize the use of these tapes. The KYEMSC will coordinate with the Kentucky Department of Public Health in conjunction with the Kentucky Safe Kids Coalition, The Kentucky School Nurses Association, EMS providers, and the Kentucky Department of Education to participate in state regionalization efforts for Bioterrorism Preparedness and **Trauma System Development** planning, and to incorporate a model disaster plan for use by public and private schools.

For goal two we will provide a variety of prehospital education programs that enhance pediatric emergency care, including the “color-coding” concept. We will work with the

KBEMS and KYEMSC Subcommittee to develop a method by which training retention may be measured.

Evaluation

The KYEMSC will meet objective one when:

- 90% of Kentucky ambulances have been equipped with color-coded pediatric resuscitation tapes and are using KYEMSC **standardized pediatric protocols**.
- **Pediatric** issues including, a **model disaster plan** for schools have been considered and incorporated into every regional plan for Bioterrorism and Trauma Preparedness.
- a pediatric triage scheme is developed and is integrated into the regionalization network.

The KYEMSC will meet objective two when:

- 250 students per year have been trained in SCOPE, PALS, PEPP, or **trauma triage**.
- **color-coding** has been established as the standard for pediatric care in Kentucky.
- a training retention evaluation format is established.

Keywords

color-coded, disaster plan, pediatric emergency care, performance improvement, prehospital education, preparedness, trauma system, pediatric protocols, trauma triage, rationalization

6.4 Biographical Sketch

BIOGRAPHICAL SKETCH

Appendix 6.4

Give the following information for all professional personnel contributing to the project, beginning with the Program Director. Photocopy this page for each person.
(DO NOT EXCEED 2 PAGES ON ANY INDIVIDUAL)

NAME	TITLE	BIRTH DATE	
Mary E. Fallat, M.D.	Associate Professor of Surgery, Dept. of Surgery Division of Pediatric Surgery University of Louisville Louisville, Ky. 40292	5/1/53	
EDUCATION <i>(Begin with baccalaureate or other initial professional education and include postdoctoral training)</i>			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Northwestern University, Evanston, Ill.	B.A.	1975	Biology
State University of New York Health Science Center at Syracuse	M.D.	1979	Medicine
University of Louisville Affiliated Hospitals		1979-1982; 1983-1985	General Surgery Residency

Massachusetts General Hospital	1982-1983	Research Fellow in Surgery
Children's Hospital National Medical Center, Washington, D.C.	1987-1989	Pediatric surgery Fellowship
Royal Children's Hospital, Melbourne	1989	Honorary Research Fellow in Surgery

HONORS

National Merit Letter Recommendation (1971)
Dean's Letter Academic Excellence, Health Science Center at Syracuse (1979)
American Cancer Society Clinical Fellowship Award (1982)
Alpha Omega Alpha (1985)
John W. Price Award for Excellence in Undergraduate Instruction, University of Louisville (1985)
American Heart Association Special Service Award for Pediatric Advanced Life Support (1983-1993)
Outstanding Volunteer Professor, Dept. of Pediatrics, University of Louisville, Kosair Children's Hospital (1989-1990)
James D. Petersdorf Community Trust Fund Award (Honorable Mention) (1993-1994)
"The Best Doctors in America" Third Listing (1997)
Presentation Academy Tower Award for Women Leaders: Science and Health Care (2000)

MAJOR RESEARCH - PROFESSIONAL INTEREST

1. Pediatric trauma
2. Pediatric pre-hospital care
3. Role of Mullerian inhibiting substance in human reproduction
4. Pediatric ethics

CURRENT RESEARCH AND OTHER GRANT SUPPORT

Dept of Health and Human Services "Implementation and Evaluation of a Support Group Network for the Families of Severely Injured Children Utilizing Interactive Video at regional Sites in a Rural State" (CO-Investigator) 1999-2001
Kosair Charities Grant "The role of mullerian inhibiting substance in childhood reproductive tract abnormalities" (Principal Investigator) 1999-2000

RESEARCH AND PROFESSIONAL EXPERIENCE: List in reverse chronological order previous employment and experience. List in reverse chronological order all publications, or most recent presentation if the 2 page limit on the sketch presents a problem.

ACADEMIC APPOINTMENTS

University of Louisville	
Associate Professor of Surgery	1993-present
Assistant Professor of Surgery	1987-1993
Tenure	1994
Associate in Pediatrics	1998-present

Associate in Anatomical Sciences and Neurobiology 1992-1995

EXPERIENCE

U.S. Army Domestic Preparedness Train The Trainer Course 1999
 EAST Trauma Director's Course 1999
 AAMC Senior Women in Medicine Professional Development Course 1998
 Chairperson, KY Chapter American College of Surgeons Committee on Trauma 1998-current
 AHA National Subcommittee on Pediatric Resuscitation 1993-current

PUBLICATIONS

1. Templeman C, Hertweck A, Fallat ME, The Clinical Course of Unresected Ovarian Torsion, Journal of Pediatric surgery 35(9): 1385-1387, September 2000
2. Fallat ME: Invited Critique: Repeat Victims of Violence: Report of a Large Concurrent Case Study. Archives of surgery 135:837-843, July 2000
3. Cook CL, Siow Y, Taylor S, Fallat ME, Serum Mullerian inhibiting substance levels during normal menstrual cycle. Fertil Steril 73(4): 859-861, 2000
4. Buchino JJ, Fallat ME, Montgomery VL: Pathological Case of the Month: Papillary carcinoma of the thyroid in a thyroglossal duct remnant. Archives of Pediatrics and Adolescent Medicine 153: 9999-1000. 1999
5. Siow Y, Stokes-Roussell S, Cook C, Taylor S, Goldsmith LJ, Belker AM, Yoffe SC, Fallat ME,: Effects of vasoactive intestinal peptide on human sperm motility. Arch Andrology 43:67-71, 1999
- 6.

BIOGRAPHICAL SKETCH

Appendix 6.4

Give the following information for all professional personnel contributing to the project, beginning with the Program Director. Photocopy this page for each person.
(DO NOT EXCEED 2 PAGES ON ANY INDIVIDUAL)

NAME	TITLE	BIRTH DATE	
Taylor, Thomas D.	Project Manager KYEMSC / KBEMS	4/8/1957	
EDUCATION <i>(Begin with baccalaureate or other initial professional education and include postdoctoral training)</i>			
Emergency Medical Technician-Paramedic			
INSTITUTION AND LOCATION	DEGREE	YEAR CONFERRED	FIELD OF STUDY
Jefferson County (Kentucky) EMS Paramedic Program		1989	
HONORS			

2000-Dr. John First Award, Nominee

1990, 1994, 1995-Jefferson County EMS Crew Of The Year

MAJOR RESEARCH - PROFESSIONAL INTEREST

1. EMS Educational Development
2. Standardized EMS testing
3. Pediatric trauma
4. Pediatric patient transport

CURRENT RESEARCH AND OTHER GRANT SUPPORT

RESEARCH AND PROFESSIONAL EXPERIENCE: List in reverse chronological order previous employment and experience. List in reverse chronological order all publications, or most recent presentation if the 2 page limit on the sketch presents a problem.

Kentucky Board of EMS, Frankfort, KY Feb 2002 –
Present

KYEMSC Project Manager

Anchorage Fire Dept., Anchorage, KY Jan 2000 –
Feb 2002 Firefighter-Paramedic

Medical City Dallas Hospital, Dallas, TX Apr 1998 –
Dec 2000

EMS Coordinator

Additional Work as Field EMT, Field paramedic, Flight Paramedic May 1980-
Present

6.5 Project Timeline

